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needed steps for safeguarding and securing access to such personal information data and ensuring that others with access to the personal information data adhere to their privacy policies and procedures. Further, such entities can subject themselves to evaluation by third parties to certify 5 their adherence to widely accepted privacy policies and practices. In addition, policies and practices should be adapted for the particular types of personal information data being collected and/or accessed and adapted to applicable laws and standards, including jurisdiction-specific considerations. For instance, in the US, collection of or access to certain health data may be governed by federal and/or state laws, such as the Health Insurance Portability and Accountability Act (HIPAA); whereas health data in other countries may be subject to other regulations and policies and should 15 be handled accordingly. Hence different privacy practices should be maintained for different personal data types in each country.

Despite the foregoing, the present disclosure also contemplates embodiments in which users selectively block the 20 use of, or access to, personal information data. That is, the present disclosure contemplates that hardware and/or software elements can be provided to prevent or block access to such personal information data. For example, in the case of advertisement delivery services, the present technology can 25 be configured to allow users to select to "opt in" or "opt out" of participation in the collection of personal information data during registration for services or anytime thereafter. In addition to providing "opt in" and "opt out" options, the present disclosure contemplates providing notifications 30 relating to the access or use of personal information. For instance, a user may be notified upon downloading an app that their personal information data will be accessed and then reminded again just before personal information data is accessed by the app.

Moreover, it is the intent of the present disclosure that personal information data should be managed and handled in a way to minimize risks of unintentional or unauthorized access or use. Risk can be minimized by limiting the collection of data and deleting data once it is no longer 40 needed. In addition, and when applicable, including in certain health related applications, data de-identification can be used to protect a user's privacy. De-identification may be facilitated, when appropriate, by removing specific identifiers (e.g., date of birth, etc.), controlling the amount or 45 specificity of data stored (e.g., collecting location data a city level rather than at an address level), controlling how data is stored (e.g., aggregating data across users), and/or other methods.

Therefore, although the present disclosure broadly covers 50 use of personal information data to implement one or more various disclosed embodiments, the present disclosure also contemplates that the various embodiments can also be implemented without the need for accessing such personal present technology are not rendered inoperable due to the lack of all or a portion of such personal information data. For example, content can be selected and delivered to users by inferring preferences based on non-personal information data or a bare minimum amount of personal information, 60 such as the content being requested by the device associated with a user, other non-personal information available to the content delivery services, or publicly available information.

What is claimed is:

- 1. A personal computing device, comprising:
- a single piece body having layers of bendable material, wherein the single piece body includes (i) a first part

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- capable of carrying a display, and (ii) a second part that is capable of carrying an input device; and
- a multi-state planar hinge assembly carried by the layers of the bendable material and positioned between and in mechanical communication with the first part and the second part, wherein the multi-state planar hinge assembly includes a planar assembly formed of the layers of bendable material that, in a first state, the planar assembly is characterized as having a first thickness and allows relative movement of the first and second parts with respect to each other, and wherein in a second state, the planar assembly is characterized as having a second thickness less than the first thickness, and capable of maintaining a fixed angular displacement between the first part and the second part.
- 2. The personal computing device of claim 1, wherein: the planar assembly includes an interlayer interposed between each of the layers of bendable material;
- the first state is an uncompressed state where at least some of the layers of bendable material are separated by a first separation distance such that a mechanical coupling between the layers establishes a first resistance;
- the second state is a compressed state where at least some of the layers of bendable material are separated by a second separation distance such that the mechanical coupling establishes a second resistance.
- 3. The personal computing device of claim 2, wherein: in the uncompressed state, an actuator permits a release of mechanical energy from the planar assembly thereby allowing at least some of the layers to maintain the first separation distance; and
- in the compressed state, the actuator prevents the release of mechanical energy from the planar assembly.
- 4. The personal computing device of claim 1, wherein: in the first state, the layers of the bendable material are capable of moving relative to each other; and
- in the second state, the layers of the bendable material are fixed with respect to each other.
- 5. The personal computing device of claim 1, further comprising an actuator including at least one of an air pump, a vacuum pump, an electrostatic polymer or an air bladder.
- 6. The personal computing device of claim 1, further comprising:
- an electronic trace that couples the first and the second
- 7. The personal computing device of claim 1, wherein the single piece body is a laptop-computing device.
 - **8**. The personal computing device of claim **1**, wherein: the first part is a first electronic device having the display;
 - the second part is a second electronic device having the
- 9. The personal computing device of claim 8, wherein the information data. That is, the various embodiments of the 55 first and second electronic devices communicate with each other by way of an electronic trace.
 - 10. The personal computing device of claim 9, wherein the first electronic device is a first tablet computer and wherein the second electronic device is a second tablet computer.
 - 11. The personal computing device of claim 1, further comprising:
 - a sensor capable of providing a first signal in accordance with the first state and a second signal in accordance with the second state;
 - a processor communicating with the sensor and an actuator, wherein